BEFORE THE

KENTUCKY PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY FOR APPROVAL OF	)	CASE No. 98-426
AN ALTERNATIVE METHOD OF REGULATION	)	
OF ITS RATES AND SERVICE	)	

TESTIMONY OF

RONALD L. WILLHITE
VICE PRESIDENT - REGULATORY AFFAIRS
LOUISVILLE GAS AND ELECTRIC COMPANY
KENTUCKY UTILITIES COMPANY

Q. Please state your name and business address.

A. My name is Ronald L. Willhite. My business address is 220 West Main Street, Louisville, Kentucky 40202.

Q. What is your position?

A. I am Vice-President of Regulatory Affairs, Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU").

Q. Please describe your work experience.

A. I started with KU in 1968 and have held various positions involving regulatory responsibilities since 1972. I have served in my present position since the merger of LG&E Energy Corp. and KU Energy Corporation became effective May 4, 1998. In my present position I am responsible for the regulatory affairs of both LG&E and KU. A complete statement of my education and work responsibilities is attached to my testimony as Appendix A.

Q. Have you previously testified before this Commission?

A. Yes. I have testified before this Commission in numerous proceedings involving the application of the fuel adjustment clause, the operation of the environmental surcharge, load forecasting and rate design, and other regulatory proceedings, including the joint application of LG&E and KU for approval of the merger of their respective holding companies in 1997.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address the regulatory issues involved in the alternative method of regulation proposed in our application. My testimony describes the details of the performance based method of regulation and how it should be implemented.

Q. Please give a general description of the proposed alternative method of regulation.

A. The alternative method of regulation uses the companies' performance as the criteria for maintaining "fair, just and reasonable" rates rather than the traditional rate of return method. We are offering to withdraw the current fuel clauses of LG&E and KU and are proposing a method of regulation that:

- provides incentives to the utilities for improved performance in managing fuel costs;
- creates regulatory certainty for customers and shareholders by immediate and direct sharing of the results of improved performance in the operation of our power plants;
- shares the resulting benefits of lower fuel costs and improved efficiency in the operation of our power plants immediately with customers through an alternative procedure;
- protects the already-high quality of service and commitment to employee safety through a penalty and reward procedure that measures:

- reliability by:

    - System Average Interruption Duration Index (SAIDI)
    - System Average Interruption Frequency Index (SAIFI)
    - Momentary Average Interruption Frequency Index (MAIFI)

- customer satisfaction by:

    - Competitive Satisfaction Survey
    - Customer Callback Survey

- safety by the Federal Office of Safety and Health Administration (OSHA) reporting standards

● preserves:

- the merger benefits of the restriction on increasing base rates for five years;

- the anticipated fuel cost savings from the joint dispatch of the generation units;

- the merger surcredit;

● gives us greater marketing flexibility in offering new or different services to our customers; and

● accomplishes all of this without any additional risk to customers.

Since LG&E's purchase gas supply clause already is subject to an alternative method of regulation, we are not proposing any additional alternative methods of regulation for LG&E's gas rates and services at this time.

Q. How did you select this particular method of performance based regulation?

A. We engaged the economic consulting firm of Christensen Associates to provide us with a survey of the alternative methods of regulation already used in other jurisdictions and a list of options to consider in implementing alternative regulation in Kentucky. We then utilized the following criteria when reviewing these options:

- Ensure Quality of Service
- Provide Incentives for Greater Efficiency and Cost Savings
- Equitably Share Benefits with Customers
- Preserve Low Rates Enjoyed by Kentucky Customers
- Maintain Financial Strength of the Utilities
- Reduce Regulatory and Administrative Costs
- Focus on Price, not Cost, to Reflect a More Competitive Environment

These criteria embody the goals described by the Commission in its Order of September 12, 1997, in Case No. 97-300, the Commission's goals stated in its *Principles and Guidelines on the Restructuring of the Electric Industry* of December 2, 1997, and our corporate objectives. The performance based method of electric regulation we are proposing meets these criteria.

Q. How do the customers of LG&E and KU benefit from the approval of the proposed alternative method of regulation?

A. Without assuming any risks associated with our proposed performance based plan, customers receive a number of benefits.

First, the base rates as they exist today for LG&E and KU customers will be restricted from increasing through May 3, 2003.

Second, LG&E and KU customers will benefit because of: (1) the continuation of the merger dispatch savings, (2) the immediate sharing of benefits from generation performance, and (3) the sharing of fuel costs savings resulting from the incentive fuel portion of the Electric Performance-Based Rate ("EPBR") Tariff.

Third, LG&E and KU customers are assured that the quality of their service should not diminish, and most likely will improve.

Fourth, LG&E and KU customers will benefit from the increased tariff flexibility so that companies can respond more quickly and creatively to their customers' specific needs.

These clearly are significant benefits for the customers of these two Kentucky companies whose current rates already are among the very lowest in the nation. These benefits can be provided in an expedited manner and can be achieved without risk to the customers.

Q. How do you propose to implement the performance based alternative method of regulation?

A. We propose that the Commission approve the EPBR Tariff. This tariff contains the ratemaking formula and terms and conditions for implementing the performance-based alternative method of regulation. Exhibit RLW-1 contains unexecuted illustrative examples of this rate schedule for LG&E and KU without issue or effective dates.

Q. When should the alternative method of regulation be implemented?

A. Rate Schedule EPBR should be implemented effective with the beginning of the first calendar quarter that is not more than 120 days or less than 30 days following the Order. For example, should the Order be issued May 1, 1999, implementation will be effective July 1, 1999. If the Order is issued June 1, 1999, then implementation would be October 1, 1999. I will now discuss the details of the various components in the EPBR Tariff.

Fuel Cost Recovery Component

Q. Please describe the details of the Fuel Cost Recovery Components in the EPBR Tariff.

A. Since 1978, the Commission has approved the recovery by LG&E and KU of incremental changes in the cost of fuel pursuant to the requirements in the uniform fuel adjustment clause regulation (807 KAR 5:056). We propose to withdraw each Company's fuel adjustment clause rate schedule (1) when the Commission approves the EPBR Tariffs for LG&E and KU and (2) after the fuel expenses incurred during the periods prior to the approval of the EPBR Tariffs are recovered through the fuel adjustment clause as described in more detail below.

The Fuel Cost Recovery ("FCR") portion of Electric Rate Schedule EPBR compares the change in actual delivered fuel cost on a cents per million BTU basis (cents/MMBTU) with the change in fuel cost determined by a fuel index. The fuel index is determined by the spot price of delivered coal on a (cents/MMBTU) basis for a five state region and is based on data published by the FERC on Form 423. Because LG&E's and KU's generators have different fuel type requirements, separate index values will apply to each utility. Each of the fuel cost indices is calculated using spot price information available in the FERC Form 423 data. An index based on spot prices sets an aggressive standard against which to measure performance and is an appropriate and reasonable benchmark to use as LG&E and KU continue preparing for competition.

Pursuant to the FCR and as illustrated by Exhibit RLW-2, if the change in the actual delivered cost of fuel is greater than the change in the fuel price index, then LG&E or KU can only recover the change in fuel cost determined by the index. LG&E and KU thus assume the risk if the change in the actual cost of fuel exceeds the change in the cost of fuel determined by the index. The maximum amount that fuel costs can change is limited to the change produced by the fuel price index. This creates an incentive for the companies to be so efficient in their fuel procurement practices that they outperform the market. It also places the companies at risk if they fail to at least match the market. For example, if the index increases five percent, but actual costs increase six percent, then the FCR is limited to an increase of only five percent. If the index decreases five percent, but actual costs decrease four percent, then the FCR reflects a decrease of five percent.

If LG&E or KU outperform the fuel price index, then they and their customers share equally in the difference. For example, if the index increases five percent, but actual costs increase three percent, then the FCR limits increases in fuel recovery to four percent. If, however, the fuel index decreases five percent, but actual costs decrease seven percent, then the FCR reflects a decrease of six percent.

The cost of fuel is defined as the invoice price of fuel less any cash or other discounts. The invoice price of fuel includes the cost of the fuel itself and necessary charges for its transportation from the point of acquisition to the unloading point, as listed in Account 151 of the FERC Uniform System of Accounts for Public Utilities and Licensees. This information currently is provided to the Commission in monthly fuel filings. We propose to file similar fuel cost data with the quarterly EPBR filing.

The FCR component in the EPBR Tariff gives LG&E and KU an incentive to become even more efficient and innovative with fuel and energy procurement strategies.

Q. **Please describe how the fuel adjustment clause will be eliminated and the FCR will be implemented.**

A. Upon approval by the Commission of the EPBR Tariff, the average per unit cost of fuel, F(m)/S(m) as defined in 807 KAR 5:056 and computed for the most recent fuel adjustment clause twelve-month expense period for which data is available prior to the effective date of the EPBR Tariff, less the Merger Dispatch Savings for that same period, will be incorporated or "rolled" into base rates. For example, if the Rate Schedule EPBR becomes effective July 1, 1999, the F(m)/S(m) for the twelve-month period ending April 30, 1999 will be incorporated into base rates for bills rendered on and after July 1. The FCR or the change in fuel costs first will be reflected on bills beginning January 1, 2000, based on the performance of the FCR for the third quarter of 1999. The existing fuel adjustment clause will terminate when fuel expenses for the second quarter, (April through June 1999) are recovered in June, July, and August 1999. Any over- or under-recovery for those periods will be reflected in the first quarter of 2000 calculation of the FCR. The rolled-in per unit amount (F(m)/S(m)) will become the base from which the change in actual and indexed determined fuel costs will be applied. The same 12-month period will be used to establish the base period actual fuel cost and fuel cost index expressed as cents/MMBTU.

The Commission has conducted several routine examinations of the operation of the companies' fuel adjustment clauses, but has not yet issued any orders. These include six month reviews (Case Nos. 96-524-A, 96-524-B and 96-524-C) and a two year review (Case No. 96-524) of the operation of LG&E's fuel adjustment clause; and six month reviews (Case Nos. 94-461-A, 94-461-B, 94-461-C, 96-523-A, 96-523-B and 96-523-C) and a two year review (Case No. 96-523) of the operation of KU's fuel adjustment clause. Prior to or concurrent with approval and implementation of the EPBR Tariff, these proceedings should be closed by Commission order that approves the operation of LG&E's and KU's fuel adjustment clauses pursuant to 807 KAR 5:056.

Merger Dispatch Savings

Q. Please describe the merger dispatch savings component of the EPBR.

A. The second element of Rate Schedule EBPR is the merger dispatch savings. Pursuant to LG&E Energy Corp. Rate Schedule FERC No. 1, Power System Supply Agreement (PSSA), LG&E and KU jointly plan and dispatch the combined generating system. Under this arrangement, the companies now have access from the other company to what is known as Internal Economy Energy for serving their retail customers. This is energy that, due to the merger, is available to the companies' customers at a cost lower than the cost of the individual company's production. Prior to the merger, this energy was available for sale off-system. By making this energy available to the sister utility, LG&E and KU are passing directly to customers a significant portion of the margin from off-system sales that would otherwise accrue to the benefit of shareholders between rate cases.

This benefit is now directly provided to retail customers through the Uniform Fuel Adjustment Clause. In the merger proceeding, we estimated these savings from the joint dispatch of the units to be approximately $36 million during the first five years following the merger. During the first three months of joint dispatch, each company has provided its customers with $812,036 of savings. Because the fuel adjustment clause is eliminated under our proposal, the joint dispatch savings are separately recognized in the EPBR Tariff formula as Merger Dispatch Savings ("MDS"). Therefore, the companies' alternative regulation proposal maintains this significant benefit for merger related fuel savings to our customers.

Generation Performance/Sharing Component

Q. Please describe the Generation Performance Component of the EPBR.

A. Almost eighty percent of the companies' investment is in generating assets. The efficient operation of these assets therefore is very important to both our investors and our customers. The generation performance component of the EPBR Tariff provides a procedure for sharing with customers the benefits from improved generation facility operating performance.

This component measures performance using joint system Capacity Factor ("CF") and Equivalent Availability Factor ("EAF") as benchmarks. For the purposes of the Rate Schedule EPBR, CF and EAF include all generating units except hydro. Capacity Factor is the kWh output divided by the product of hours in the period and the rated capacity of the utilities' generation assets. It is a measure of the utilization of the generating units. Equivalent Availability Factor is the percentage of time the generating units are available to serve load, adjusted for de-ratings. It is a measure of the readiness of our units to produce electricity. Both EAF and CF routinely are determined and reported to the East Central Area Reliability Council and in fuel filings with the Kentucky and Virginia Commissions.

Improved performance in the operation of the generation units is highly beneficial to customers because it 1) lowers fuel costs due to the increased availability of our low cost generators; 2) increases the potential for sales; and 3) provides the opportunity for increased margins on sales as a result of the lower fuel costs. The EPBR Tariff transfers these benefits to customers in two ways. First, the FCR component of the proposed EPBR Tariff passes to retail customers their share of the lower fuel costs. Second, benefits from increased sales and margins are shared through the generation performance sharing mechanism.

Since the generating assets of LG&E and KU are operated as one system, the measurement of performance must be that of the combined system. Exhibit RLW-3 shows the composite generation performance of LG&E and KU from 1991 through 1997, using both EAF and CF.

Generating Performance will be measured on a rolling 12-month basis for the period ending each calendar quarter and compared against the highest composite performance of LG&E and KU from 1991 through 1997. The highest composite performance is used for comparison because of the upward trend in the generation performance measure. This is shown in Exhibit RLW-3. The highest performance level of LG&E and KU during this period is 71.8 percent. This value is used as the starting point to create the appropriate challenge for the future. It is defined as the "Threshold" in the EPBR Tariff for calculating the generation performance component.

Each percentage point improvement in performance above the Threshold is designated as an Indicated Savings Value and is worth $625,000 per quarter for each company. Customers of each company share equally in this benefit for performance exceeding the Threshold. For example, see Exhibit RLW-4, page 14 of 24. If the EAF is 86.0% and the CF is 58.9%, the composite is 72.5%. The composite value is then compared against the Threshold of 71.8% to determine the amount of the improved performance, or 0.7%. Applying the amount of improved performance times $625,000 creates

$437,500 to be shared equally between the customers and KU for the quarter. The same example also applies to LG&E and its customers.

Under our proposal, customers immediately and directly benefit by as much as $5 million each year per company or $1,250,000 per quarter. The Generation Performance component captures $20 million in value per year from the combined operation of the generating facilities of LG&E and KU. Half of this value is provided to customers and half stays with the companies as an incentive for increased performance. As compared to traditional regulation, where benefits to customers are recognized only in base rate proceedings, under our PBR Plan, customers receive their share immediately through the EPBR Tariff as the companies respond to the challenge of the performance measure.

Service Quality Component

Q. Please describe the Service Quality Component of Rate Schedule EPBR.

A. An additional element that acts as a counter-balance to the other components of our performance plan is the Service Quality Component. This additional measure is necessary, because LG&E and KU must reduce costs in order to achieve the merger savings and manage costs against the trend of inflation. This is especially important because LG&E and KU cannot increase base rates for five years except for extraordinary circumstances. The risks to quality of service created by the incentive sharing components and the five year cap on base rates will be effectively counter-balanced with the quality of service component in the EPBR Tariffs.

The service quality component in the EPBR Tariff measures the quality of service of the companies through objective, industry-accepted measures for outage performance, customer satisfaction and employee safety. The testimony of Messrs. Wood and Hewett review the historical quality of service performance of LG&E and KU. Dr. Kaufmann's testimony presents the details to the six different measures and the application of these measures to LG&E's and KU's operations.

The service quality component of the EPBR Tariff will either penalize or reward the companies for their respective customer service performance as measured by these standards. Under the service quality component, each company is at risk for up to $5 million a year in penalties and will have the opportunity to earn up to $5 million a year in rewards for customer service performance.

The service quality component in the EPBR Tariff ensures that customers will continue receiving the high quality of service enjoyed today and provides an incentive for the companies to render even higher levels of service quality during the operation of the EPBR Tariffs.

Combined service quality measures that result in a reward for the current quarter will only be included in the EPBR formula to the extent that the Generation Performance amounts are available to offset this reward. Any Service Quality reward in excess of the Generation Performance will be banked and included in the following quarter's Service Quality computation. Any rewards not recovered after four quarters will be relinquished. As a result, Service Quality rewards do not directly cause an increase in customers' bills.

Balancing Adjustment

Q. Please describe the balancing adjustment and the reasons why it is needed.

A. The balancing adjustment is similar to and serves the same purpose as the "over/under recovery" mechanism in the fuel adjustment clause and the "correction factors" in the environmental surcharge clause. The EPBR Adjustment factor is computed by dividing the EPBR Amount in the current quarter by the kWh sales in the current quarter. Since this factor will then be applied to kWh sales in a different quarter, any over or under-collection will be reconciled with a true-up with the original amount that was to be collected.

Q. Please describe how the various components in the EPBR Tariff will work together to produce a performance adjustment to bills.

A. The EPBR Tariff is a formula. The adjustment to customers' bills is created by the operation of the formula in the EPBR Tariff. The relationship of the two incentive/sharing components, the merger dispatch savings component, the quality of service component and the balancing adjustment is expressed in the following formula:

$$EPBRAF(q) = EPBRA(q)/KWH(q)$$

$$EPBRA(q) = FCR + MDS + GP + SQ + BA$$

Where:

EPBRAF(q) = Electric Performance-Based Rate Adjustment Factor for the current quarter

EPBRA(q) = Electric Performance-Based Rate Amount for the current quarter

FCR = Fuel Cost Recovery

MDS = Merger Dispatch Savings expressed as a credit

GP = Generation Performance expressed as a credit

SQ = Service Quality

BA = Balancing Adjustment

KWH = Kentucky Retail Jurisdictional kilowatt hour sales in the current quarter

q = Current quarter shall be the second calendar quarter preceding the billing calendar quarter in which the EPBRAF is billed. (Due to FERC Form 423 data availability the current quarter for the FCR computation will be defined as the three-month period ending February, May, August, or November)

Q. When will the adjustments to customers' bills from the EPBR Tariff occur?

A. The adjustments would begin in the first full billing month of the calendar quarter that is at least 30 but not more than 120 days following approval of the EPBR Tariff. The adjustments resulting from the EPBR Tariff will be allocated to customer classes on the basis of total kWh sales to each customer within each class on the basis of kWh sales.

Q. **What reporting and monitoring steps should be taken following the approval of the EPBR Tariff?**

A. We propose that LG&E and KU file quarterly EPBR factors and reports with the Commission. These filings will contain the actual information used to calculate adjustments under the EPBR Tariff. The proposed reporting forms are contained in Exhibit RLW-4. This exhibit contains sample figures for illustrative purposes but actual figures are used when available. The proposed forms were developed to provide appropriate supporting information to the Commission prior to billing of the Electric Performance-Based Rate Adjustment Factor. Form 1.0, as presented on Exhibit RLW-4, page 1 of 24, provides a summary of the EPBR Tariff components, the Kentucky retail kWh sales for the current expense quarter and the calculation of the Adjustment Factor to be billed in the quarter following filing of the report. We suggest completed forms be filed ten days prior to the beginning of the billing cycle.

Exhibit RLW-4, pages 2 through 24 presents Forms 2.0 through 6.0 which provide the calculation of each individual component of the EPBR Tariff. Form 2.0, Exhibit RLW-4, page 2 of 24, provides the calculation of the FCR component. This form shows the change in actual fuel costs and the change in fuel costs occasioned by the index. The determination of whether: 1) the change in fuel costs is limited to the change produced by the index when actual costs have changed more than index costs, or 2) there is sharing of the change in fuel costs when the change in actual costs is less than the change in indexed costs is provided. The appropriate percentage change is then multiplied by the base fuel amount, which is the Fm/Sm rolled-in to base rates at the initiation of the EPBR Tariff, with that product then multiplied by the Kentucky retail kWh sales to determine the dollar amount of the FCR component.

Form 2.1, Exhibit RLW-4, pages 3 through 6 provides the calculation of actual fuel costs, on a cents/MMBTU basis, for the current expense quarter. Forms 2.2, 2.3, 2.4, 2.5 and 2.6 Exhibit RLW-4, pages 7 through 11, provide for each month of the expense quarter the Form 423 cents/MMBTU data used to establish the index for each company in the five-state region by fuel type. Form 2.7, page 12 of Exhibit RLW-4 provides the calculation of the composite index value in cents/MMBTU for the quarter by fuel type and in total.

Form 3.0 at page 13 of Exhibit RLW-4 provides the calculation of the merger dispatch savings component, MDS. Savings for the expense quarter from Internal Economy purchases and sales are provided for each expense month of the quarter.

Form 4.0 at page 14 of Exhibit RLW-4 provides the calculation of the Generation Performance Component (GP). The Composite Performance ("CP") defined as the average of the EAF and CF on a 12-month rolling basis for the expense quarter is provided. The difference between the current quarter CP and the Threshold is computed. If that difference is positive, it is multiplied by the quarterly savings value of $625,000 for each company and then multiplied times fifty percent to arrive at the customers' share. Form 4.1 at page 15 of Exhibit RLW-4 provides the CP for the month and quarter. Pages 16 through 18 of Exhibit RLW-4 are Forms 4.2 and 4.3 which provide additional support for the monthly EAFs and CFs.

Form 5.0 through 5.4 at pages 19 through 23 of Exhibit RLW-4 provides the calculation of the Service Quality Component (SQ). For each SQ measure, the current expense quarter measure is compared to the benchmark with the difference then multiplied by the per-unit value of the SQ measure. The preliminary sum of all the SQ measures is then checked to see if any maximums are reached. First, SQ rewards and penalties cannot exceed $1,250,000 in any quarter. Then, if SQ rewards exceed GP, this difference is banked or carried forward to the next quarter. SQ for the current quarter is then set equal to GP. The banked amount may be carried forward for up to four quarters after which time the unrecovered amount will be forfeited. If the current quarter results in penalties, any previously banked SQ rewards will be credited against these penalties up to the level of GP.

Form 6.0 at page 24 of Exhibit RLW-4 provides the calculation of the balance adjustment to correct for any over- or under-recovery of previous EPBR Tariff amounts.

Q. **What additional monitoring and reporting steps are needed?**

A. We further propose that there be an interim review after three years to assess the operation of the EPBR Tariff. Three years will allow sufficient time for the full effect of the performance measures to impact operations. During the course of the PBR, quarterly filings to support the calculations in the EPBR Tariff will be provided to the Commission for its on-going monitoring and review. At the three-year review, it is anticipated that a more comprehensive evaluation of the EPBR Tariff will be performed. Each utility will prepare an evaluation of the EPBR Tariff and file a report with the Commission. The evaluation should address the appropriateness of the measures that are used to track performance. Consideration should also be given to whether the performance measures are providing the intended incentives and whether the EPBR Tariff is producing fair, just and reasonable results. If there is an apparent problem, then the interim review will provide an opportunity to modify the performance measure, the benchmark or the EPBR Tariff where warranted.

Before this review and throughout the operation of the EPBR Tariff, the Commission can continue to monitor all the activities, books and records of LG&E and KU. The Commission can also schedule hearings or informal conferences as necessary to review any questions about the operation of the EPBR Tariff or changes in the EPBR charges.

Tariff Flexibility

Q. **Please describe the tariff flexibility portion of your request for an alternative method of regulation.**

A. Customers are increasingly interested in a variety of energy services and options. We routinely receive requests from customers for rates that meet their specific load requirements and operational needs. We believe it is very important to have flexibility to meet customers' needs during the transition to full retail competition. Customers also want certainty that any arrangement they may negotiate with us can be approved within 30 days or less. Otherwise, there is a disincentive for customers to expend resources in an effort to pursue opportunities that will contribute to the economy of the Commonwealth.

A more expedient regulatory process than provided under traditional regulation is needed so that LG&E and KU can render such customer-responsive services. We therefore are requesting marketing flexibility subject to the following conditions:

- prices must be greater than the marginal cost to provide service;
- customers can choose between the current base rates (recourse rates) or negotiated energy and demand rates based on value of service;

- optional class tariffs can be offered if they have no significant revenue impact, such as time of day rates for smaller industrial or residential customers;

- contracts and optional class tariffs will be approved within 30 days; and

- existing customers will not be harmed.

Q. **Does the performance based method of regulation include the environmental surcharge?**

A. No. The Environmental Protection Agency has announced that it intends to reduce allowable NOX emissions from generating units within the next several years. This action will make existing requirements more stringent and impose new requirements for the operation of our power plants, requiring further capital investments in existing and new pollution control facilities. The changes in existing environmental regulations and the probability of increased environmental regulation are changes over which the companies have no control. The environmental surcharge allows LG&E and KU to recover their costs of maintaining current pollution control facilities and new facilities as necessary while providing customers with the benefit of the continuously declining rate base.

Q. **Do you have an exhibit which shows the regulated return for LG&E and KU?**

A. Yes. Exhibit RLW-5 shows the regulated returns for LG&E and KU for the twelve month period ending March 1998, the last full pre-merger calendar quarter, and how the returns were calculated. These returns are consistent with recently approved returns of 10.50 percent to 12.75 percent as reported in *Regulatory Focus*, July 8, 1998. Further, the Companies are exposed to additional risks under the performance-based form of regulation. By withdrawing the fuel adjustment clauses, the Companies have given up the certain pass-through of fuel-related expenses. They are providing the immediate sharing of benefits from improved generation performance. They are subject to significant dollar penalties if service quality deteriorates.

Q. Is it necessary to use traditional regulation to make certain that the alternative method of regulation is begun at the appropriate starting point?

A. No. In fact, the current circumstances provide an opportune time to begin an alternative form of regulation. First, the rates of both LG&E and KU are among the lowest in the country. Second, both utilities have achieved these low rates by being superior performers. The empirical analysis presented in the testimony of Dr. Lowry of Christensen Associates demonstrates this claim of superior performance. Finally, this alternative ratemaking proposal has been prepared on the premise that a traditional cost-of-service review would not be performed. If the Commission believes a traditional review is necessary, then LG&E and KU would withdraw their election for an alternative form of regulation. This additional risk with regard to fuel procurement, generating performance and service quality is unacceptable if the Commission reduces the rates of LG&E or KU as a result of a traditional cost-of-service review.

Q. **What action should the Commission take regarding LG&E and KU's applications?**

A. The Commission should approve the alternative method of regulation proposed in our application with the conditions that: (1) the described EPBR Tariff become effective with the first full billing month of the calendar quarter that is at least 30 days but not more than 120 days following approval by the Commission; (2) the fuel adjustment clause tariff be withdrawn effective with the recovery or crediting of fuel expenses as appropriately incurred prior to the effective date of the EPBR Tariff; and (3)the pending fuel adjustment clause cases be resolved and final orders issued. The Commission also should approve our request for tariff flexibility as described in my testimony.

Q. **Does this conclude your testimony?**

A. Yes, it does.

VERIFICATION

STATE OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Ronald L. Willhite,** being duly sworn, deposes and says he is Vice President of Regulatory Affairs for Louisville Gas & Electric Company and Kentucky Utilities Company, that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Ronald L. Willhite
RONALD L. WILLHITE

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 8th day of October, 1998.

Janice A. Westenkofer (Lewis) (SEAL)
Notary Public

My Commission Expires:

11/17/2000

APPENDIX A
RONALD L. WILLHITE

In December 1969, I received a Bachelor's degree in electric engineering from the University of Kentucky. Subsequently, I have taken both undergraduate and graduate level courses in accounting and economics and have participated in Company-sponsored management and computer courses.

In September 1968, I joined Kentucky Utilities Company on a part-time basis as a student engineer in the Company's System Planning Department. In December 1969, upon receiving my B.S.E.E., I became a Technical Engineer-System Planning. In May 1973, I joined KU's Rates, Contracts and Franchises Department. In September 1981, I was promoted to Director of Cost Analysis and Load Research, and in January, 1982 to Director of Rates and Economic Research. In April 1987, I became Director of Rates and Rate Research. In December of 1992, I became the Director of Regulation. In 1997, I assumed the position of Vice President of Regulation and Economic Planning. In May 1998, I assumed the responsibility of Vice President of Regulatory Affairs for Louisville Gas & Electric Corporation and Kentucky Utilities Company.

I am a registered professional engineer and a member of the National Society of Professional Engineers. In the past, I have taught the Cost of Service portion of the Rate Fundamentals School sponsored by the Edison Electric Institute.

Standard Rate Schedule EPBR

Electric Performance-Based Rate

Applicable:
To all electric rate schedules

Rate Mechanism:
The monthly amount computed under each of the rate schedules to which this tariff is applicable shall be increased or decreased by the Electric Performance-Based Rate Adjustment Factor (EPBRAF) at a rate per kilowatt-hour of monthly consumption during the billing calendar quarter computed as follows:

$$\mathbf{EPBRAF(q) = EPBRA(q) / KWH(q)}$$

$$\mathbf{EPBRA(q) = FCR + MDS + GP + SQ + BA}$$

Where:

EPBRAF(q) = Electric Performance-Based Rate Adjustment Factor for the current quarter
EPBRA(q) = Electric Performance-Based Rate Amount for the current quarter
FCR = Fuel Cost Recovery
MDS = Merger Dispatch Savings expressed as a credit
GP = Generation Performance expressed as a credit
SQ = Service Quality
BA = Balancing Adjustment
KWH(q) = Kentucky Retail Jurisdictional Kilowatt-hour Sales in the current quarter
q = Current quarter shall be the second calendar quarter preceding the billing calendar quarter in which the EPBRAF is billed (Due to FERC Form 423 data availability the current quarter for the FCR computation will be defined as the three-month period ending February, May, August, or November)

Fuel Cost Recovery (FCR)

Fuel Cost Recovery (FCR): Changes in the level of purchased fuel cost on a ¢/MMBTU basis will be compared to changes in a fuel cost index to determine the level of fuel cost to be charged to customers. Each quarter, the Company's current purchased fuel cost will be compared to the cost of fuel purchased by the Company during the Base Period and the fuel cost index for each quarter will be compared to the fuel cost index for the same Base Period. The resulting percentage change in the Company's cost of purchased fuel will be compared to the percentage change in the fuel cost index. When the percentage change in the Company's fuel cost is greater than the percentage change in the index, the percentage change in the index will be used for fuel cost recovery purposes. When the Company's percentage change in actual fuel cost is less than the change in the fuel cost index, the difference will be shared equally between the Company and customers by using the average of the two percentages for fuel cost recovery purposes.

Current Quarter Actual Fuel Cost (QA): Actual fuel cost shall be the average weighted cost of fuel purchased for each quarter, stated in ¢/MMBTU. Included therein will be the cost of coal delivered (including transportation costs) and the cost of gas delivered.

Standard Rate Schedule EPBR

Electric Performance-Based Rate (continued)

Fuel Cost Recovery (FCR) Continued

Current Quarter Fuel Cost Index (QI):

$$QI = (a\% \times CC) + (b\% \times PR) + (c\% \times MS) + (d\% \times HS) + (e\% \times NG)$$

Where:

The percentages: a, b, c, d and e will be based on the relative amounts of MMBTU purchased by LG&E during the current three-month period.

All prices are weighted averages for the current three-month period and are expressed in ¢/ MMBTU

The source for all coal data is FERC Form 423 for reporting electric utilities in a five-state region which includes Indiana, Ohio, Kentucky (excluding LG&E Energy Utilities), West Virginia, and Tennessee.

CC = Compliance Coal: Weighted average spot price of delivered compliance coal (≤ 1.2 lb. SO_2/MMBTU) excluding Powder River Basin Coal

PR = Powder River Basin Coal: Weighted average spot price of delivered coal from the Powder River Basin

MS = Medium Sulfur Coal: Weighted average spot price of delivered medium sulfur coal (1.21 to 3.0 lb. SO_2/MMBTU)

HS = High Sulfur Coal: Weighted average spot price of delivered high sulfur coal (> 3.0 lb. SO_2/MMBTU)

NG = Natural Gas: The natural gas price shall be the average of the current three-month period of weekly *Natural Gas Week* postings for Spot Prices on Interstate Pipeline Systems for CNG Transmission Co. - North and South

Fuel Cost Recovery (FCR) will be computed on a quarterly basis as follows:

$$FCR = BK \times CR \times KWH$$

$$\text{If } CA > CI \text{ then } CR = CI$$

$$\text{If } CA < CI \text{ then } CR = (CA + CI) / 2$$

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Electric Performance-Based Rate (continued)

Fuel Cost Recovery (FCR) Continued

Where:

Base Period = 12 months ended (Date) determined as the most recent 12-month period prior to the effective date of this tariff for which data is available

BK = Base Period Fuel Cost Recovery included in Base Rates expressed as $.______/Kwh as determined using 12 months of data for F(m)/S(m) as defined by 807 KAR 5:056 for the Base Period excluding any Merger Dispatch Savings

CR = Percentage Change in the Fuel Cost Recovery

KWH = Kentucky Retail Jurisdictional Kwh Sales for the current three-month period

BPA = Base Period Actual Fuel Cost = ____¢/MMBTU based on the weighted average cost of fuel purchased during the Base Period

BPI = Base Period Fuel Cost Index = ____¢/MMBTU consistent with the computation of the quarterly index (QI) using the 12 month Base Period

QA = Current Quarter Actual Fuel Cost in ¢/MMBTU

QI = Current Quarter Fuel Cost Index in ¢/MMBTU

CA = Percentage Change in Actual Fuel Cost = (QA - BPA) / BPA

CI = Percentage Change in Fuel Cost Index = (QI - BPI) / BPI

Merger Dispatch Savings (MDS)

Merger Dispatch Savings (MDS) will be expressed as a credit in the quarterly EPBRA(q) and will be computed on a monthly basis pursuant to the Power Supply System Agreement (PSSA) approved in LG&E Energy Rate Schedule FERC No. 1. Each quarterly computation of the EPBRA will include the three month accumulation of the Kentucky retail jurisdictional merger dispatch savings computed as follows:

$$\mathbf{MDS = IEP\$ + IES\$}$$

Where:

IEP$ = Internal Economy Purchases equal to one-half of the difference in the purchasing company's avoided fuel cost and selling company's fuel cost pursuant to Rate Schedule FERC No. 1.

IES$ = Internal Economy Sales equal to the difference in the transaction price and the selling company's own fuel cost pursuant to Rate Schedule FERC No. 1.

Standard Rate Schedule EPBR

Electric Performance-Based Rate (continued)

Generation Performance (GP)

Generation Performance (GP) will be expressed as a credit in the quarterly EBPRA(q) and is based on the Composite Performance (CP) of the Equivalent Availability Factor(EAF) and the Capacity Factor(CF) computed on a 12-month rolling quarter-ended basis using the combined LG&E/KU generation system computed as follows:

CP = (EAF + CF)/2

ISV = (CP - THRESHOLD) x $625,000 per % point

IF CP < THRESHOLD then ISV = zero

GP = 50% x ISV

Where:

CP = Composite Performance.

ISV = Indicated Savings Value of $625,000 for each percentage point improvement in the Composite Performance over the established Threshold.

Maximum ISV = $2,500,000 per quarter.

Maximum GP = $1,250,000 per quarter.

EAF = Equivalent Availability Factor expressed as a percentage. The EAF is the availability of installed generation capacity (adjusted for de-ratings and excluding hydro) to meet load requirements for the 12-month rolling quarter-ended period. The 12-month rolling average EAF is the weighted average of the 12 monthly system EAF values weighted by the number of hours per month.

CF = Capacity Factor expressed as a percentage. The CF is a measure of the utilization of the generating units (excluding hydro) for the 12-month rolling quarter-ended period. The 12-month rolling average CF is the weighted average of the 12 monthly system EAF values weighted by the number of hours per month.

THRESHOLD = **71.8%** = The established composite benchmark which must be exceeded to produce an ISV.

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Service Quality (SQ)

Service Quality (SQ) is comprised of five measures with separate penalties or rewards to the Company that are accumulated for an overall Service Quality (SQ) amount. SQ is computed each quarter as follows:

SQ = SAIDI$ + SAIFI$ + CUSTSAT$ + CALLHANDL$ + SAFETY$ + PREVSQ$

Where:

SAIDI$ = System Average Interruption Duration Index (SAIDI) Measure
SAIFI$ = System Average Interruption Frequency Index (SAIFI) Measure
CUSTSAT$ = Overall Customer Satisfaction Measure
CALLHANDL$ = Call Handling Customer Satisfaction Measure
SAFETY$ = Safety Performance Measure
PREVSQ$ = Net Service Quality rewards carried forward from previous quarters
Maximum Penalty SQ = $1,250,000 per quarter (prior to the recovery of any PREVSQ$)
Maximum Reward SQ = lesser of $1,250,000 per quarter or GP

**SAIDI$** = System Average Interruption Duration Index (SAIDI) Measure. SAIDI$ shall be calculated quarterly by subtracting the current 12-month rolling quarter-ended measurement (QSAIDI) in minutes of average duration of interruption per customer from the established SAIDI benchmark of 65.8 minutes and multiplying the resulting difference by $30,000 per minute of duration. Positive improvements in SAIDI shall produce rewards and negative values will produce penalties.

SAIDI$ = (65.8 minutes - QSAIDI) x $30,000/minute

**SAIFI$** = System Average Interruption Frequency (SAIFI) Measure. SAIFI$ shall be calculated quarterly by subtracting the current 12-month rolling quarter-ended measurement (QSAIFI) in average frequency of interruption per customer from the established SAIFI benchmark of 1.16 outages and multiplying the resulting difference by $425,000 per outage. Positive values in SAIFI$ will result in rewards and negative values will result in penalties.

SAIFI$ = (1.16 outages - QSAIFI) x $425,000/outage

Standard Rate Schedule EPBR

Electric Performance-Based Rate (continued)

Service Quality (SQ) Continued

**CUSTSAT$** = Overall Customer Satisfaction Measure. CUSTSAT$ shall be calculated quarterly by comparing the current 12-month rolling quarter-ended measurement (QCUSTSAT) of the company's overall customer satisfaction to a similar measurement (PEERS) of the established peer group of comparable companies. The Company will be rewarded for having overall customer satisfaction in excess of 10 percentage points above this peer group's average performance and penalized for customer satisfaction below this peer group's average performance. Each percentage point in overall customer satisfaction will be worth $72,500 of reward or penalty. No penalty or reward will be assessed if the Company's performance is within the deadband between the peer group's average performance and the peer group's average performance plus 10 percentage points.

If QCUSTSAT > (PEERS +10%pt) then CUSTSAT$ = [QCUSTSAT - (PEERS + 10%pt)] x $72,500/%point

If QCUSTSAT < PEERS then CUSTSAT$ = (QCUSTSAT - PEERS) x $72,500/%point

If PEERS ≤ QCUSTSAT ≤ (PEERS + 10%pt) then CUSTSAT$ = Zero

**CALLHANDL$** = Call Handling Customer Satisfaction Measure. The CALLHANDL$ shall be calculated quarterly by comparing the current 12-month rolling quarter-ended measurement (QCALLHANDL) of Call Handling Customer Satisfaction to the established Call Handling Performance Range (CHPR) or deadband within which no penalties or rewards will be assessed. CHPR will be established as the sample margin of error for the Customer Call Handling Callback Survey with UCHPR being the upper boundary of the performance band and LCHPR being the lower boundary of the performance band. Performance above the UCHPR will result in rewards. Penalties are assessed when the QCALLHANDL is lower than the LCHPR. Each percentage point outside the range will be worth $18,000.

If QCALLHANDL > UCHPR then CALLHANDL$ = (QCALLHANDL - UCHPR) x $18,000/%pt

If QCALLHANDL < LCHPR then CALLHANDL$ = (QCALLHANDL - LCHPR) x $18,000/%pt

If LCHPR ≤ QCALLHANDL ≤ UCHPR then CALLHANDL$ = Zero

Service Quality (SQ) Continued

SAFETY$ = Safety Performance Measure. The SAFETY$ shall be calculated quarterly by comparing the current 12-month rolling quarter-ended measurement (QSAFETY) of the company's OSHA Recordable Incidence Rate to the established Safety Performance Range (SPR) or deadband of 3.39 to 5.01 incidence rate within which no penalties or rewards will be assessed. Performance outside the SPR will result in rewards when the incidence rate is lower than the range and penalties when the incidence rate is higher than the range. Each .1 incidence outside the range will be worth $32,500.

If QSAFETY < 3.39 then SAFETY$ = (3.39 - QSAFETY) x $32,500 per .1 incidence rate

If QSAFETY > 5.01 then SAFETY$ = (5.01 - QSAFETY) x $32,500 per .1 incidence rate

If 3.39 ≤ QSAFETY ≤ 5.01 then SAFETY$ = Zero

PREVSQ$ = Net Service Quality rewards carried forward from previous quarters. If the preliminary sum of the five SQ measures is greater than GP for any quarter, the difference (Net Service Quality rewards) will be carried forward for up to four quarters after which time any unrecovered amount will be forfeited. SQ will be set equal to GP for the current quarter.

Balancing Adjustment (BA)

The Balancing Adjustment (BA) will be computed on a quarterly basis to reconcile any variance in the EPBRA calculated from the second preceding quarter and the EPBRAF billed in the current billing quarter computed as follows:

$$BA = EPBRA(q-2) - [\ EPBRAF(q-2) \times KWH(q)\ ]$$

Where:
EPBRA(q-2) = EPBR Amount calculated from the second preceding quarter
EPBRAF(q-2) = EPBR Adjustment Factor calculated from the second preceding quarter and billed in the current quarter
KWH(q) = KY Retail Jurisdictional Kwh sales for the current billing quarter